



**CAST IRON AIR BRICK COMPANY**

Building Architectural Enhancements

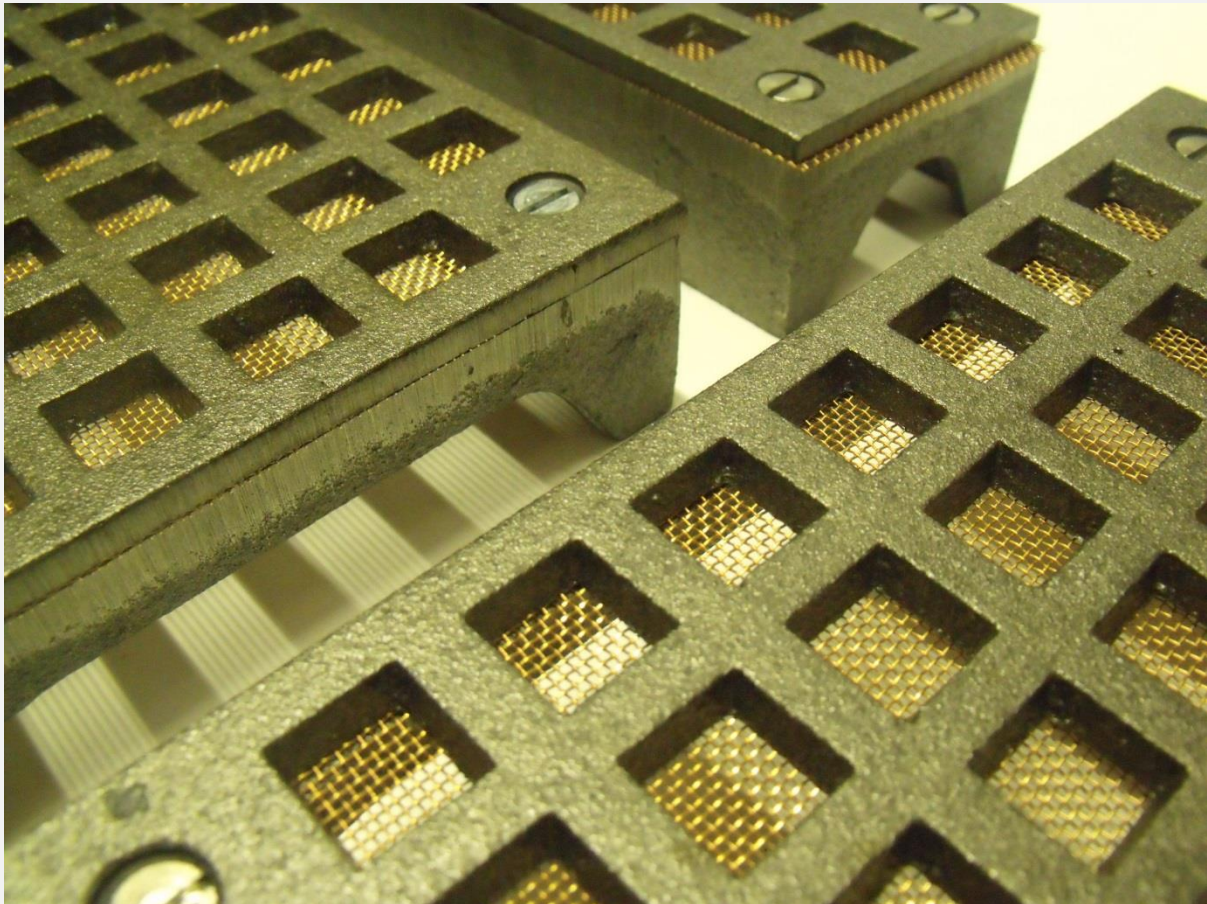
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Specification Sheet - ciabFLY1-2021

[www.castironairbricks.co.uk](http://www.castironairbricks.co.uk)

## FLYSCREEN CAST IRON AIR BRICK

### Item FLY3 - FLY6 - FLY9



Cast iron fly screen air bricks are made from grey iron, cast in sand moulds bonded with resin to a fine cast finish and are available in three sizes (9x3, 9x6 and 9x9) (see table below for metric mm sizes). This is a unique product in cast iron, exclusive to the Cast Iron Air Brick Company.

#### **Problem Solver**

Traditionally, mesh was inserted behind the back of air bricks to keep out bugs but this meant the mesh was mortared in and trapped. Over time the mesh would become clogged with dust, dirt and insects and eventually it would prevent any air flow, rendering the air brick useless. The alternative was to “glue” (mainly with lead solder) a mesh across the front of the air brick and although this allowed the mesh to be held tightly and could be cleaned it looked ugly.

Our cast iron fly screen air brick is a 21<sup>st</sup> century design providing a solution to this problem without looking out of place in listed buildings and conservation areas. It has a removable front with a framed mesh that can be cleaned whenever is required and reassembled. It is frequently specified by architects on traditional building upgrades and period property extensions. Ordinarily, mesh reduces the free area available for ventilation to such an extent that small grilles and single sized air bricks are “suffocated” however the large square holes on the front of the cast iron plate are deliberately large to allow a very usable amount of air through the unit.

### **Construction**

The flyscreen air brick is made up of three components – a cast iron air brick frame which is mortared into the brick course, a copper flymesh and a cast iron square hole flat front plate with countersunk mounting screw holes in each corner. The front plate is screwed to the frame through punched holes in the mesh and secured in place by four stainless steel machine screws. The mesh is a copper mesh of 1mm gauge with 1mm x 1mm square holes ideal for preventing ingress of flies, wasps and rodents.

### **Uses**

It is mainly used as an exterior air brick to supply natural ventilation to interior rooms and also sub floor ventilation to prevent damp and dry rot. It can also be used as an extractor outlet vent grille over ducting. The larger FLY9 is especially useful for providing higher volume ventilation for properties with damp and condensation problems. It is mainly used in period properties or anywhere where the ingress of insects will be a problem or where wasps etc are known to be troublesome. The mesh also reduces the back draught caused during excessive winds in exposed conditions and can also reduce the ingress of rainwater.

### **Examples**

The flyscreen air brick has been supplied to hundreds of individual property restorations and new builds across the country and has been used in construction at the Royal Park Richmond. The flyscreen cast iron air brick is exclusive to the Cast Iron Air Brick Company and has been very popular since its creation in 2008. One of our largest ever orders was to Galliford Try for installation of the FLY6 cast iron air brick in the new construction of London Olympics 2012 for use in the athletes village. This is an imperial cast iron air brick but can be used along with duct tape in conjunction with corresponding cavity wall sleeve ducting. The single brick sized 9x3 can be used along with periscope duct and also with rectangular to round plastic adapter to convert to 4 inch (100mm) diameter round

### **Flood Screen** (available for FLY3 and FLY6 only)

The flood screen is a cork gasket that can be used to replace the mesh when flooding is imminent and likely to occur, it is then removed when danger has passed. It is useful to keep on standby for ground floor installations especially in low lying areas, properties near the coast or rivers or properties in an area with a history of flooding.

## **Finish**

The frame is supplied unpainted but the front plate can be either bare metal or painted black. We can supply bespoke RAL painted fronts to match customers' existing brickwork or requirements. Please note that items painted in such a way are nonreturnable, there is an additional charge for this and it will add 1-2 weeks onto the delivery time.

## **Environmental Benefits and Longevity**

All the cast iron air bricks we commission are UK made and this product is made in Wolverhampton, England.

Cast iron is not affected by UV and is fire resistant and fully recyclable. The cast iron used in the manufacture of this product is sourced from scrap iron with the addition of a small amount of pig iron. On average, 95% of the casting is recycled material. The moulds used to create the castings are generated using sand that is packed in a box with one of our patterns and this sand is used again and again to create further castings.

Casting in the UK has ensured all our products are made to strict emission and pollution levels in accordance with the latest legislation and that the workers creating these products are fairly paid and have a safe working environment in which to earn a living.

Melting iron requires a substantial amount of energy from either gas or electricity and to offset the CO2 emissions from this process we have planted over 300 trees in our own 3 acre wood. The annual absorption of CO2 from our wood is enough to ensure the production of our castings is carbon neutral.

As we don't import any of our products, the mileage from foundry to our finishing workshop and distribution bay in North Devon is very low keeping our carbon footprint small and once installed we expect this air brick to last a life time.

## **Maintenance**

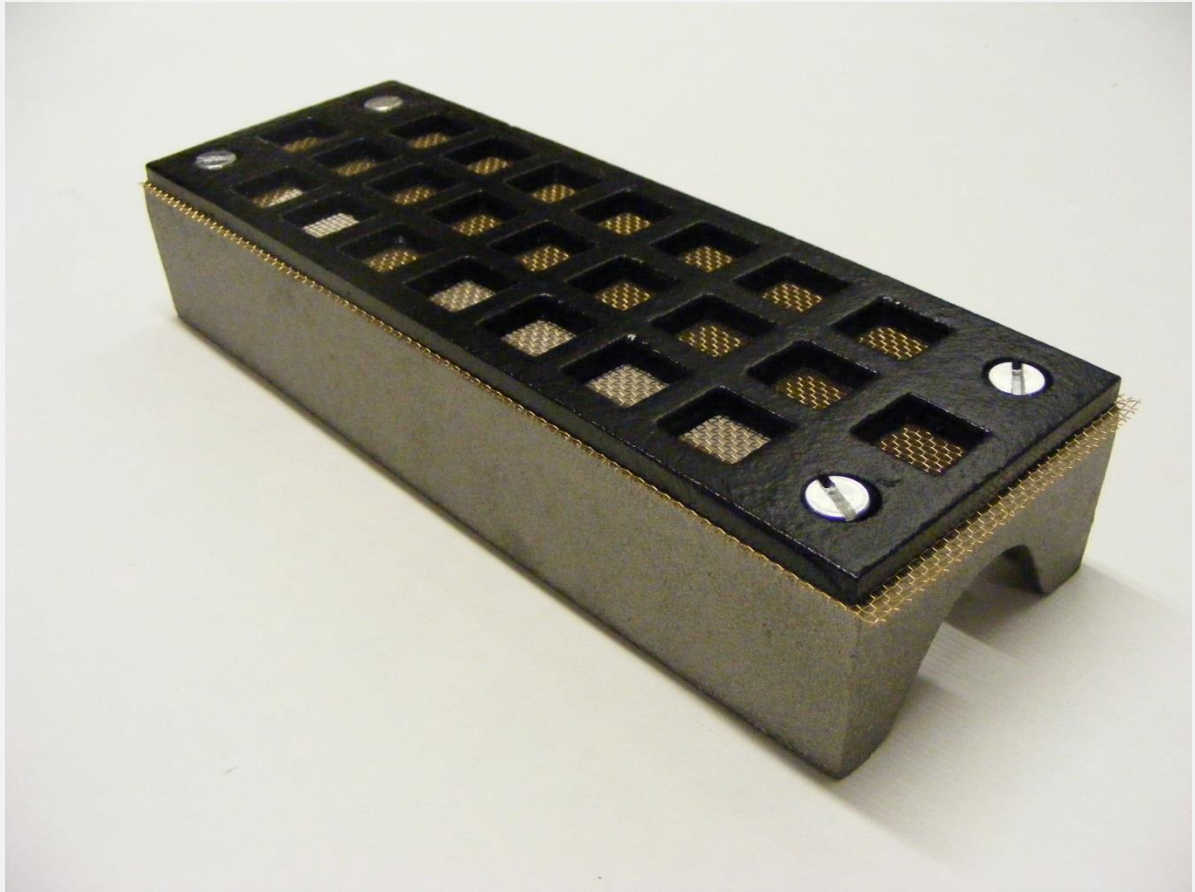
The bare cast iron frame will rust but this rust forms a protective layer to prevent further corrosion and requires no further maintenance. Bare front plates, again will rust and are ideal for installation in red brick properties but may stain light coloured brickwork or light coloured rendered properties. Painted fronts use three part epoxy primer followed by two part epoxy black gloss top coat which is extremely hard wearing and is unlikely to require repainting within a decade unless the paint is chipped or the air brick exposed to salt. The gloss paint will dull over time, in exposed conditions it is likely to dull to a satin sheen in a year or two. The mesh is removable for cleaning and should be inspected twice yearly where it is used for natural ventilation in sheltered positions, more frequently in exposed positions or if used as an extractor outlet. Mesh should be cleaned either by blowing air or vacuuming if the debris is non greasy or can be dissolved in a degreaser such as acetone and drying before reinstallation.

## **Notes for architects**

We have chosen copper mesh as the material for the gauze in this air brick for two reasons, it is a traditional material used in buildings for hundreds of years and is therefore complimentary to the cast iron used in the air brick (unlike stainless steel for example) and it is a stable material that forms a dull oxide that is repugnant and even toxic to rodents. The screws supplied are stainless steel and as such cannot be painted, they will dull over time. Installers tell us they have had success staining the screw heads with permanent black ink when clients want the screws to match black painted fronts. As with all installation of mesh used in ventilation grilles, specifiers should be aware of the latest Gas Safe and HETAS regulations regarding solid fuel, oil and gas appliances.

The imperial flyscreen air bricks can be used in conjunction with duct tape and metric plastic ducting supplied by Rytons which is also available on our website as well as cast iron air bricks. Straight through telescopic cavity wall sleeves are available in three sizes for the FLY3, FLY6 and FLY9 (corresponding ducts number CAVHEXT3, CAVHEXT6 and CAVHEXT9). The FLY3 can also be used with periscope ducts (item periscope) as well as 4" round to rectangle adapter (item PERRND) to allow for under floor ventilation where the outside ground level has risen or where connection to a round duct is necessary.

SPECIFICATION TABLE - FLYSCREEN AIRBRICKS							
Item Code	Nom. Size (Inch)	Size in mm	Vent Size (mm)	Weight (KG)	Free Area with mesh (mm <sup>2</sup> )	Plate Thickness (mm)	Depth (mm)
FLY3	9 x 3	228 x 78	16 x 16	1.5	3900	8	50
FLY6	9 x 6	228 x 151	16 x 16	2.4	8500	7	50
FLY9	9 x 9	226 x 226	16 x 16	2.8	13000	7	45
Material – Grey cast iron 250 with stainless steel screws and copper mesh							
<b>British Made Product</b>							
Cast iron foundry source – Wolverhampton, England							



For more details please see our website...

<https://www.castironairbricks.co.uk/product-category/flyscreen-air-bricks/>

Alternatively email or call us

[Sales@castironairbricks.co.uk](mailto:Sales@castironairbricks.co.uk)

01598 711999

Delivery for this product is normally from stock for low volume orders and these are sent out the next working day for orders received before 12 o'clock. Ideally we hold 30 units bare metal and 10 units painted black of each size although this is a guide and can quickly change. If we need to paint more black this will be 5- 7 days longer, bespoke painted fronts ( customer supplied RAL) are typically 10-14 days

Cast Iron Air Brick Company, Down Farm, Brayford, EX32 7QQ



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